

POTOMAC VALLEY RADIO CLUB NEWSLETTER - NOVEMBER 1999

This electronic version does not contain:

Full page HRO ad
Quarter page RF Connections ad
Full page order form for PVRC QSL cards

PLEASE SUPPORT OUR ADVERTISERS; THEY SUPPORT PVRC

This electronic version contains an obituary for W3EIV
written by K3ZO that is not in the paper edition. --- editor

PVRC CALENDAR

Weekly Wed
BWI Regional weekly breakfast. Wednesdays 7:30 am, Basil's Deli,
Elkridge Landing Rd near BWI.

Monthly Fri
SWVA meeting night and Roanoke location varies each month. Please
check with K4IQ.

Monthly
Over-the-Hill Luncheon. Date to be announced. Hosts listed on
reference page.

Oct 30/31
CQWW DX Contest. Club competition & 5 Mil award.

Nov 5 Fri
SWVA, Shoney's in West Salem, VA at 6:00 pm

Nov 6/7
ARRL CW Sweepstakes. Club competition & 5 Mil award

Nov 8 Mon
Central meeting at the Patrick Henry Library in Vienna, VA.
ELECTION OF OFFICERS.

Nov 12 Fri
PVRC/NC meeting WOUCE. Note meeting on Friday this month.
Directions in minutes.

Nov 12 Fri
Central Virginia at First Mennonite Church, Staples Mill Road,
Richmond. 3DAOCA presentation.

Nov 16 Tue
Northwest meeting, Tully's Grill, 1080 W. Patrick St, Frederick,

MD at 7:30 pm

Nov 16 Tue
Tidewater Colony. The Golden Corral in Chesapeake. VA. Meeting
with VA-DXCC.

Nov 20/21
ARRL SSB Sweepstakes. Club competition & 5 Mil award.

Nov 27/28
CQWW CW Contest. Club competition & 5 Mil award.

Dec 4/5
ARRL 160 Meter CW Contest. Club competition & 5 Mil award.

Dec 11/12
ARRL 10 Meter Contest. Club competition & 5 Mil award.

Dec 13 Mon
All welcomed to the Central Christmas party. Details to be
announced

William R. Long, W3EIV of Gaithersburg became a silent key on 26
August 1999. His license lapsed and was KC3AG for a few years.
Bill was a long time member of PVRC and operated from many DX
locations while on overseas assignments with the CIA. The
electronic edition of this issue at www.pvrc.org has a obituary by
Fred, K3ZO.

REMEMBERING BILL LONG, W3EIV by Fred Laun, K3ZO

On Thursday 26 August 1966, Bill Long, W3EIV became a Silent Key.
There will be a tree planted near the Hospice office and his ashes
will be placed under the roots. Bill was a long time member of
PVRC and operated from many DX locations while working there. My
first contact with him was while he was in the Philippines. Now
he is operating from a place with no QRM, QRN or ignition
noise. -- Andy Anderson, W3XE

It's a shame to let the death of a friend and fellow Radio Amateur
go by without trying to leave a little picture of what he did and
what he was like for posterity, so since I haven't seen anyone
else give a wrap-up of Bill's life on here, I will do my best. I
didn't take any notes but I do have some recollection of some of
the things he talked about and if I don't get them exactly right
they are pretty close. If anyone has anything to add I certainly
think it would be appropriate.

I wasn't a close friend of Bill's when I first joined PVRC. At
that time he was the one I always confused in SS with another

PVRC'er, W3EIS, Don McLennon (SK), who later became W3IN and then N4IN. I remember driving around town not long after I came to this area, trying to get a look for myself at all the PVRC antenna farms. All there was at Bill's house, however, was a lone 60 foot wooden utility pole with nothing on it. Bill was on one of his many assignments overseas at that time.

However once I joined the Over-the-Hill gang I got to know Bill much better, because he was a regular OTH attendee and also a regular at the Friday repeater lunches at Shoney's in Laurel, and since we had both spent a fair amount of our working lives overseas we ended up swapping yarns on a number of occasions.

According to Buckmaster, Bill would have turned 82 only a couple of weeks before his death on Thursday. Up until a few months ago Bill was in pretty good shape and was quite regular at these functions. His pipe was his constant companion and on occasion he ruffled the feathers of a few fellow OTH'ers by dragging it out and lighting it up after lunch, no-smoking-area be damned!

During the greater part of his working life Bill was a Communications Officer for the CIA. Though there was always a certain vagueness about exactly what he did in that respect given his employer's penchant for discretion, one had the impression that he was principally involved in setting up equipment and communications circuits as opposed to actually doing the operating of the official radios. Among the countries he mentioned having spent a good deal of time in were Taiwan, the Philippines, Iran, Venezuela and Paraguay.

Immediately after World War II the ARRL didn't require that a DX station demonstrate that he had obtained a legitimate license or that he was actually in the country he claimed to be in in order to be counted for DXCC. Amateur Radio operators were considered to be proper gentlemen and it never even occurred to the DXCC authorities to question the various operations of Americans overseas, even though there was a little informal discussion among DX'ers at the time about how Gus Browning really knew that he had stepped across the border from Nepal into Tibet when the rugged mountainous area was poorly marked. But Gus worked everyone he could hear and kept the multitudes happy, and so his QSOs from Tibet counted. All of this changed when the infamous Don Miller got into the DXpedition game and tried to re-arrange the DXCC Honor Roll according to what he thought it ought to be.

Bill said he managed to get on the ham bands from every country he was in, usually from a radio installation in an American Embassy or Consulate in the country in question. He said that he told Vic Clark and others just prior to one ARRL DX Contest that he would be on from Maracaibo, Venezuela as YV1AW, and so he was, giving everyone in the club what was at the time a nice rare 80 meter CW multiplier. Much later Bill made it known that YV1AW

was a self-assigned call and that he was operating from the American Consulate premises even though the Consul General had turned down Bill's request to let him operate from there. Bill simply waited until the Consul went out of town on business. That was Bill's customary way of getting on the air overseas -- assign yourself a call that sounds legitimate and go on the air from the Embassy. But since Bill would show up for only a few QSOs, and usually only during contests, his operations never caused a stir.

Bill was known as KC3AG for a number of years because he had forgotten to renew his license in time and W3EIV expired. He was really happy when the recent Vanity Call Sign program allowed him to get W3EIV back.

One of his favorite stories involved an ARRL DX Contest which he operated in from this country as W3EIV. Bill knew of a Government rhombic farm which had recently been decommissioned but was still equipped, so he arranged to use it in the contest, operating it by remote control from a location at some distance from the transmitter site. When one British station stopped Bill in the middle of the contest to say that he didn't care whether Bill was using a 20 db rhombic fixed on Europe or not, he was STILL too loud to be legal, Bill called the transmitter technician on the landline and said: "I thought I told you to turn the power way down this weekend." The transmitter operator said: "I did. We've got it down as low as it will go." "How much is it reading right now?" Bill inquired. The transmitter operator replied: "Why it's only reading about 4.5 KW right now." I believe Bill said he made an immediate QRT at that point.

Bill's other hobby was sports cars, and I take it he had raced a good bit in his younger days. He also talked about hunting tigers with Iranian Generals in the Iranian mountains during the time of the Shah. Guns were another subject dear to his heart. But his first love was always ham radio and he had been proud to be associated with Vic Clark, Lenny Chertok and other contest giants of this area.

CENTRAL MEETING MINUTES, 10/11 by Rich Boyd, KE3Q, Secretary

We met at the Episcopal Church in Temple Hills. Congratulations to W3AZ for keeping track of the meeting dates and making sure we had the key from W3TOM! We skipped the pre-meeting dinner since we got word from W3AZ beforehand that Topolino's has burned down! We'll try to come up with an alternate restaurant for future pre-meeting dinners. In attendance were: WR3L, KE3Q, N3OC, K3MM, WK3I, W3AZ, K3ZO, K3TM, W3OU, AD3F, and KN6BU.

This was the second meeting for two who were voted in; W3OU had attended the FARfest and KN6BU arrived late to last months meeting but it was agreed that counted. This was a first meeting for AD3F.

Steve Bonk, W3OU, an extra class, lives in Riva (Annapolis area), on a bluff on the South River with a 200 degree salt water shot. Just like W3AO Field Day, eh? He has a new Cushcraft X7 on that 40' tower and a Hy-Gain HyTower. His Butternut on 80/40 works well too, he says, but he wants to put down more radials. He also has another place with a vertical in Ocean City. Steve was licensed in '66 and was formerly WN3GDX, WA3JDH, and KJ4G. Was on last year in CQWW phone and CW, uses CT, made 400K in one of the DX tests last year. He also enjoys boating.

Jim Heiertz, KN6BU, an advanced class, now lives in Woodbridge but came to us from Anaheim, California, where he worked for Autonetics, a division of Rockwell. Back in California, his ham friends said if he was moving here he should look up PVRC, the big contest club! All right! We told him about the fine local club there, Woodbridge Wireless, and the many PVRCers there and a few who aren't in PVRC but that we wish were! He has never lived outside California, this will be his first experience with winter (!) so he needs to buy a coat! He has a TS-440 and plans to put up an inverted vee. I suggested he look up NR4M (ex-NJ4F) and crew, and that K4JA would be needing ops too. Jim was licensed in 1991 as KC6SWE, later KC6RNF. Has done FD and opped at the KI6X M/M and at WB6YPX and K6NX, mostly phone -- and has been the mobile marine op for boat races. I said he should hook up with AARC since so many of them are boaters.

This was the first meeting for Gene Smar, AD3F, who is new to PVRC and seems to be a big 160 fan. He said he has a pair of Drake C-Lines on 160, an inverted L, two EWES, and was in ARRL and CQ 160 CW contests last year. I believe he and K3TM came together from Rockville near K6IR.

We went around and each spoke a little about what we've been up to and plan for the fall season. WK3I, an electrician, has been swamped at work, so hasn't had much time to do ham radio, but plans to let nothing stop him from getting on in the 160 and 10M contests in December. I'm sure he'll try to get in the CQWWs and SSs before then too. Highwinds from "Floyd" recently knocked down his 160 dipole and inverted L, which he'll need to fix.

K3ZO has been trying to keep his two Titan amps working but finally decided he needed another, so has acquired a third. He said a pair of 3CX800A tubes work great when they're new. "Really bark," is what he said. And Fred is convinced 10M will be much better this year than last, but he noted last year when 10 was okay on Saturday and poor on Sunday, so if it's open on Saturday you need to spend time there just in case things deteriorate later. But Fred thinks 10 will be big. Mike Martin, RFI and noise specialist, has been doing a lot of work near Fred's and really has things quiet now. Fred hopes it stays that way. His 160 antenna came down in the winds too but is now back up.

W3AZ has been sidelined by health problems but seems to be getting back into the action. His old W3DZZ tribander has been going for some 40 years. A blown 15M trap was repaired.

WR3L expects AA3SC (a good young op) to single op in CQWW phone and a multi-2 is planned for CQWW CW.

K3TM doesn't know if he'll be QRP or low power in SS CW. For phone SS he may be out of town, and he plans to go back to Labrador as VO2WL for CQWW CW, giving out zone two.

N3OC agreed with Fred that 10M will be big this year. Brian leaves for the Caribbean next week where he'll be FS/N3OC before going to V26B as part of the M/M crew for CQWW phone. They'll be head to head with PJ9B and others trying to claim (or keep) the all time M/M DX record. A lot of new gear has been sent to Antigua this year such as an ACOM autotune amp and vertical arrays off to the side. Brian noted that W3GNQ will be out of town and won't have his normal multiop on for CQWW phone. Brian also lost his 160 wire(s) in high winds and is looking forward to a big effort in the 10M test, mixed mode. He said he would have made a bigger effort last time if he had known he would do as well as he did. When "up here," Brian usually contests from his place in the Ocean Pines development of Ocean City, a nice oceanside marsh QTH. Weekdays he in Chevy Chase.

KE3Q plans to return to WP3R for both modes of SS and hopes all PVRcers will seek him out for a QSO. This thing can be won or lost by just a few! Be sure to confirm it's WP3R you're working -- last year some miscopied the calls of others and worked NP3A or other Puerto Rican stations instead of WP3R! Hey, work others if you care to, but be sure to work WP3R too! And, Rich hopes to return to A61AJ for CQWW CW, and will be at W3LPL for CQWW phone. New QTH plans are in the building permit stage.

K3MM, our president, had a good time doing CQWW RTTY at W3LPL with "the usual crew." Conditions were good, activity is up. Last year's world M/M record of 4.1M was eclipsed by this year's 6.2M, but it looks like that'll only be good enough for 3d/world with P3A at 7.5M claimed and HC8N at 11M claimed. Ty was in his first ever sprint CW and says he needs to tune faster -- the 5-kHz QSY rule was challenging. Ty has ordered a new Force-12 C49 tribander -- 49' boom! This has to be the king of the tribanders! It has a total of 26 elements, 4 on 20, 6 on 15, and 13 on 10 (which adds up to 23??) The cost, \$1,700. And Ty has ordered a second one for a stack, and hopes to get the 40M beam too, designed to not interact much with the 20/15/10 antenna. Ty plans to be at W3LPL for both modes of CQWW. Tyler noted the upcoming hamfests, Oct. 24 at Westminster and Oct. 31 in Carlyle. The latter conflicts with CQWW phone.

A slate of officers for 2000 was nominated, being: N3OC for Pres., K4VV for VP, W2GG for secretary, and WR3L for treasurer. The nomination was passed unanimously. Traditionally, at least in recent years, our officers have worked their way up from secretary, VP, to Pres. and we continued that this year. Certainly N3OC has "paid his dues" and deserved this opportunity (in my opinion). We got little or no feedback from the regions about having officers from regions other than central (or nearby ones), but this is something we are serious about. K4VV said he would gladly yield the vice presidency to someone from a region if they will step forward, or if a region will put somebody forward. Our thinking is that going with new officers will buy us at least another year for us to discuss with the regions coming up with and implementing a plan to spread the "officerships" around. We want maximum involvement from regions and don't want the traditional PVRC to just dominate everything forever. If the regions are contented to have us keep doing it the way it's been done previously, we can do so, but we really would like the regions to have every opportunity to take part in overall PVRC club "governance," policy making, planning, you name it.

We had some discussion of the above and how we might have meetings that draw from across "PVRC-land," like W3LPL's annual June open house does. I've suggested the possibility of an open house at "the new KE3Q" on the afternoon of FARfest in coming years. We've talked with K4JA about having some sort of open house at his new QTH on Virginia's Northern Neck in coming years. We realize that any meetings in Maryland are far north of our geographic center, quite a haul for our farthest south regions. We're still trying to make a good transition from the old PVRC, whose center of gravity was maybe in Maryland with our secondary pole in Northern Virginia to the new PVRC with our NC and Central Virginia regions being huge contributors.

Meeting second Monday of next month, at Patrick Henry Library, Route 123, Vienna, Virginia, informal dinner for those who want to at Outback Steakhouse nearby beforehand. Meeting time 7:30 at the library, over promptly at 9:00. The tentative date for the Christmas dinner is Dec 13th.

PVRC So MD by Barry Shapiro, WR3Z)

The regional meeting took place Monday September 20th at the QTH of Wayne, N1WR. Attendees included members N1WR (Wayne), WR3Z (Barry), and N3AFT (Mike), as well as guests N3YZU (Dave), K3DSP (Tom) and N3YUG (Jason).

After brief introductions and summary of summer activities, time was spent introducing the guests to PVRC and discussing the different aspects of ham radio that club members are exposed to such as contesting, DX, VHF, antennas, and propagation. Also

discussed was the history of PVRC, where we're at now with the various regions and diversification amongst its members.

Discussion then centered on contesting and how various contests can help sharpen ones operating skills in both CW and SSB (such as Sweepstakes). Dave, Tom and Jason were participants in this year's Field Day. Since upgrading to Advanced class recently, K3DSP has been more active on the HF bands and is now pursuing DX on a regular basis, while sharpening his CW skills.

WR3Z will be operating CQWW Phone at W3GNQ's and CW at WR3L's homes. N1WR will be operating either single op or multi-single in both this fall.

The meeting ended with the group viewing the ZL9CI video from the Dxpedition earlier this year. The next meeting will take place in December (or sooner if requested).

OTH MEETING OF 29 SEP 99 by Andy Andersen, W3XE

Those in attendance were: Hugh, W3ABC; Bill, W3AZ; Jim, W3CP; Lawrence, W3GN; Bill, N3RR; Tony, K3WX; Fred, K3ZO; Dale, W4DM; Ben, AA4XU; Ken, K6IR; Mel, K7CMZ.

The first item of business was: CHOW. With everyone with a full plate the conversation went from loud to a dull roar. As I had to leave early I wasn't privy to the intelligent discussions which went on before the meeting was adjourned. To get details on this contact Tony or other attendees.

Three people had made reservations but didn't turn up. This affects my credibility for the next reservation at the Holiday Inn. If you would like to be added to the list send me an email ([\[email protected\]](#)) or if your not on the net give me a LL (301-384-7771 - Leave a Message). The next meeting will be hosted by Bill, W3AZ, LL to 301-292-5797.

SWVA MEETING by John Mitchell K4IQ

The SWVA PVRC Chapter kicked off the new contest season with our first monthly meeting at the Western Sizzlin' Steak House in Roanoke on October 1st. Present were K1GG, Gordon; KC9LC, Randy; K4EP, Philip; 5B4AFM, Stavros; W0MAN, Susanne; W4JAM, John; N4GU, Mike, N4EL, Nat, and K4IQ, John. We began by welcomeing our guest, Stavros, 5B4AFM. Stavros is a senior in EE at Va Tech, where he is active with contesting from the club station, K4KDJ. Stavros likes the DX contests, such as CQ WW, WAE, and IARU, and was also quite active from the home school contest station 5B4ES. Stavros plans to go on to grad school at Tech, so we hope he will seek PVRC membership. This will also help with the required 2/3 team makeup for club credit for K4KDJ multi operations.

We discussed upcoming contest plans, particularly club events. N4GU has a Force 12 C4S going up and is looking forward to SS in particular, where he expects enhanced 40M performance over his old wire antenna. N4EL bought Mike's old TH2 antenna and rotor and has dug the hole for his house bracketed 25G, and hopes to have something turning in the air for this year's tests. K1GG said tonight's meeting helped him rev up for the upcoming season, something both he and K4IQ said has kind of snuck up on us, with everyone so busy. K4IQ is hoping to get the Force 12 two element 40M on top of the 100 ft. ridge top tower before Sweepstakes. John, W4JAM, and Susanne, WOMAN, are adjusting to the smaller antenna farm here in VA and looking at houses with good antenna farming possibilities. Randy, KC9LC, will get on for the tests from home, using wire antennas and verticals. K4EP, Philip, and 5B4AFM, Stavros will be on from K4KDJ.

Mike, N4GU directed us to the CQ Contest reflector archives to find out about the new Cabrillo format for contest logging that will be mandatory in Nov. 2000. Talking about tower work, Gordon remarked about the unusual phenomenon of wasps that follow towers up to the top and then circle around them this time of year. K4IQ had noticed this phenomenon too, and Gordon said they look like they're nesting in the tower, but actually are just attracted to the tower, swarming around it, paying little attention to people working there. K4IQ said he'd climbs with a bug bomb.

We set the next meeting for November 5, 6PM, at the Shoney's in West Salem, off exit 137, I-81.

DINNER ROVER MEETINGS by Jack Hammett, K4VV

A dinner meeting was enjoyed with a great meal at Mortons Of Chicago--The Steak House at Tysons Corner, VA, at 7 PM on Wednesday, October 6, 1999. The participants were: W3YOZ, K4IQ, K4VV, K6LEW, N3AM, K3SA, John Williams/K8JW, and Ted Cohen/N4XX. John and Ted were visitors. Great steaks and a very enjoyable evening were experienced with a lot of lively radio talk.

Marty/W3YOZ highlighted the continuing development of his VHF site near Altoona PA; tower building continues with a Rohn 45 now at 100'; a 12'x20' building is under construction that adds to the initial 10'x12' building). Pictures showed the progress.

John/K4IQ discussed his plans for the 100' Rohn 25 at his developing ridgetop site and alternative antenna choices; a Force 12 2el 40m yagi is being assembled.

Jack/K4VV is pleased with the performance of the C31XR @ 75', and has tower capability for more antennas.

Jim/WX3B is exploring the potential for new land, house, and tower(s) with various antenna possibilities. Jim is planning to

operate CQWW at W4MYA.

Owen/K6LEW described the successes of the W8GP Team effort in the September VHF Contest; an array of 8 antennas were employed on 432; the stack worked very well into New England. A stack of 2x5el on 6m were employed towards New England. The Team used 7 towers at 55'.

John/N3AM described his recent upgrade replacing his beams with a Force 12 C31XR and a Cushcraft XT-240 with help from K3SA and K4VV. Patterns and VSWR measurements are very satisfying after some tweaking. John is pleased.

Steve/K3SA has new equipment coming, including an Alpha 87A. He is exploring other station upgrades such as automatic antenna switching.

John Williams/K8JW has a new Force 12 C3 in the box awaiting the right time to go up at his place on the water. John has participated in the Annapolis December Dinner(s).

Ted Cohen/N4XX joined us after meeting K4VV at work on the day of the dinner. Ted discussed some of his 160m experiences and several of the propagation phenomena detailed in his 1998 CQ articles and recent book. Ted enjoyed the evening, and added some real sparkle to the conversation. Maybe we can interest Ted in PVRC and adding his 160m scores to our bottom line.

The Dinner Rover meetings are organized by W3Y0Z, K4IQ, and K4VV who meet often for a meal. We sometimes plan far enough in advance and are going to a place that is flexible enough to accommodate a group, so we invite PVRC and other friends to join us.

Addendum #1 Another dinner at Morton's was enjoyed on Tuesday, October 12, 1999. The participants were K4VV, K2BU, and NI4F. Jerry NI4F from Fredricksburg, VA often joins us on 3810 or 1865. Jerry commutes to the Beltway to work, and is not yet interested in contesting, but is serious in station building. Charlie Gyurnia/K2BU from Tabernacle, NJ is an FRC contester whose daughter is now a Freshman at George Mason. Charlie has some interest in lake-front property for future retirement--two VA lakes are candidates. Maybe PVRC is in Charlie's future?

Addendum #2 Dinner Meeting at K4VV's home. An after work business dinner of thirty people was hosted at the home of Jack K4VV and wife Carol on the evening of Wednesday, October 20. The group narrowed down to four hams at the end of the evening: PVRC'rs Jack/K4VV and John/W1HIR and two visitors--Ted Cohen/N4XX (2d meeting) and Ken Irish/W8JVP. We did a tour of the antennas by flashlight and the radio room with a demo of computer logging, radio interface (not working right now), autotune amp, and

automatic antenna switching. We made a few contacts on 15, 20, 75, and 160m and talked about station upgrades. We had a conversation about the interesting activities of PVRC. Ted Cohen is speaking at the Vienna Wireless meeting on Friday night, 10/22 at 7pm; his subject is 160m operating experiences. I will invite Ted Cohen to our next Central Region meeting.

PVRC/NC October 7th meeting minutes by Pete Soper, KS4XG
PVRC/NC met at Ryans Restaurant, Cary 6-7:30pm (many came at 5:30).

Attendees: Will AA4NC, Guy K2AV, Brian K3KO, Bob K4HA, Jim K4MA, Jim K4QPL, Pete KS4XG, Mark KI7WX, Jim N3QYE, Dan N3ND, Joe NA3T, Jay NT4D, Jeff NX9T, Jack W0UCE, and Don W9VAK.

Announcements

Next month's meeting will be FRIDAY November 12th at the new QTH of Jack W0UCE, a long time PVRC member who has moved to the Raleigh area. Jack and his wife will be making a special effort to host us so please RSVP via email to Jack at [\[email protected\]](#) or by phone at 846-1848 so he can plan food and beverages. Directions to Jack's place are at the end of the minutes.

Jim K4QPL is looking for a station to use for Sweepstakes CW. Jim can be reached at [\[email protected\]](#).

Upcoming Contests:

- + October 30 CQWW Phone
- + November 6 Sweeps CW
- + November 12 WAE RTTY
- + November 20 IARU 160
- + November 20 Sweeps Phone
- + November 20 RSGB 1.8mhz CW
(imagine all those guys on one freq.)
- + November 26 CQWW CW

Membership Jack W0UCE has joined us and so the chapter membership is 32. Jack brought two guests to the meeting, Don W9VAK and Dan N3ND, part of the CW team during RARS Field Day. Welcome Don and Dan.

Business Joe NA3T was invited to give a presentation about a novel method of detecting unusual VHF propagation at a future meeting, probably in December. Details TBD. PVRC/NC members should rely on their email for meeting details. It appears that the regular Thursday Ryans meeting may be the exception rather than the norm in coming months! KS4XG wants to do a spring cookout.

Members news N4AF made it through his third hurricane in 12 months and is rebuilding his wire antennas. He just added a 40m diamond quad at about 100' which a couple chapter members heard

last night, getting S9+30 reports from Europe. Howie will be hosting a M/S effort for CQWW CW with K2AV. AA4NC will host a M/S effort for CQWW phone and is looking for operators. Will currently has KI7WX and K4MA signed up. Will is also having an open house October 26th for the NC State student club members. After being clobbered by Fran NT4D was happy to report an uneventful session with Floyd.

K3KO put a 402CD on a new 70 foot Rohn 25G tower. Asked what else is on it Brian replied that this was antenna #11 and he's taking a break!

K4QPL was going to use the KS4XG station for CW Sweepstakes but now need to get his own tower up quickly.

N3QYE is putting the NC State antenna farm back together and preparing for Sweeps. Jim asked for help with getting some gain on 40m. AA4NC and K4HA volunteered help with this to get a rotatable dipole or two element beam mounted above the TH6.

K2AV is pouring concrete for his tower base soon. He'll be putting up a Trylon self supporting tower and plans a 40m yagi at 81' and Force 12 C31XRs at 95 and 60 feet. Guy is negotiating with Force 12, considering buying one of their unadvertised 40m antennas, a three element one with special linear loading and 85% of full size. Guy is also getting a converted prop pitch rotator from M2.

KS4XG expects the new building shell for his station to be put up on the 15th with interior work starting soon after. The hope is to move equipment in for Christmas. Amica was generous and covered all material and labor costs for the original building as well as full replacement of damaged contents. Pete will operate CQWW phone at N4AF.

K4HA will be hosting a M/S effort for CQWW phone with NX9T. NX9T has taken his tower and antennas down and is preparing to move. Jeff will be in temporary quarters for a few months while their new house is finished and is expecting to make the final move in the Spring.

KI7WX is preparing for a Rohn 25 tower and stacked X7 tribanders for his home station. Mark will be operating SS phone from the N4AF station SOHP.

K4MA has a conflict for CQWW phone part of the weekend but will pitch in at the AA4NC station.

Next Meeting The next PVR/NC meeting will be Friday November 12th, starting at 6:30pm at the W0UCE QTH in North Raleigh.

Directions:

"From the Beltline take Six Forks Road north, proceed past Strickland, follow Six Forks to the Bayleaf area (4 Miles north of Strickland) Landmark is the Bayleaf Fire Dept. and a vegetable stand on the left. Follow signs to Blue Jay Point County Park. Make the hard left turn on Six Forks just past the vegy stand and continue on Six Forks crossing Falls Lake. Continue up the hill and watch for a long wooden privacy fence on your right which ends at Pleasant Union Church Road. This will be the first right hand turn after crossing the bridge. At the end of the fence turn right on Pleasant Union Church Road. W0UCE is the second driveway on the left - 2913 Pleasant Union Church Road. Phone 846 1848 and talk in on the RARS 146.64 Repeater. Parking is prohibited on the road into the park - pull into Jack's driveway park to the right side. The driveway will accommodate approximately 10-12 cars so car pooling is recommend,"

Mark, KI7WX, adds the following comments. -editor. It's not at all important, but I'll be installing Bencher Skyhawks at 75 over 40 feet rather than X7s. I think Bencher has done FB with this one and the few folks that have them up are saying very positive things. For those interested, it came down to the Skyhawk vs the Force 12 C3E or C19 and a comparison between a tri stack at 30/60/90 and the 75/40 two stack. For various reasons, including the objectives behind the array, available space, and of course financial resources, I eventually decided on the two stack.

Thanks to everyone that provided opinions on the topic. Reasons for choosing the Skyhawk over the Force 12 antennas are that (a) the Skyhawk is about perfect size for what I want to accomplish having a 24' boom with 3L for 15 and 20 with 4L on 10M (b) they are priced very competitively at \$699 from HRO which includes stainless hardware and 1:1 choke balun at the feedpoint (c) there are enough C3 stacks around already. We'll see how they play when they go up, won't be ready for this season, hopefully early spring.

RAPPAHANNOCK CHAPTER MEETING by Bill DeLage K1SE, [\[email protected\]](#)

The Rappahannock Chapter of the PVRC met on Saturday, October 9th at the home of K4ZW in Stafford, VA; the gathering was a combination club chapter meeting and antenna /tower installation party.

In attendance was the host K4ZW and K4EU, K4GMH, K7SV, NR4M, and K1SE. The group gathered at approximately 1000 local and a discussion of general ham radio topics over coffee and bagels ensued, in addition to touring the antenna farm.

The club chapter meeting started at approximately 1100 local, being called to order by K7SV. There being no old business to settle, the club members discussed the following:

NR4M surfaced the subject of recruiting new club members for PVRC; sources and methods of recruitment and focusing on new CW operators.

General discussion contest equipment such as amplifiers, rotor control units, and band switching.

Contest participation for the 1999 contest season with a focus on which contests. It was decided upon that the first contest participation for the Rappahannock chapter Multi-op station at NR4M would be the ARRL CW SS.

The members then zero'ed-in on a list of requirements to make the NR4M station ready for the CW contest season. Topics included the methodology for band switching, networking of PC's, contest software preparation, selection of antennas and any work that will be required on station equipment and antennas.

The members then discussed strategies for operating, operator schedules, and other preparations.

The meeting adjourned at 1230 local, when all participants then commenced with the antenna/tower work on the K4ZW antenna farm.

The PVRC chapter motto for the upcoming contest season will be: "The RappPack'ers are ready--are you? Let the pileups begin!"

NW REGIONAL MEETING MINUTES - Sept 21, 1999
by Greg Altig, N5OKR ([\[email protected\]](#))

In attendance were members N5OKR, K3IXD, W8ZA, N8II, W3ZZ, W3NRS, K3DNE, N3YDT, WD3A, W3EKT, K3LP, K3UG, K2UOP, and K8OQL.

Business: N5OKR, Greg, welcomed the members and reminded them of the FARFest this Sunday. He also reminded them that the NW Regional Awards Program began as of 9/01/99 and to forward scores and rumors to him to gather for consideration.

W3NRS, Norm, worked an exhausting 21 Qs in the MD/DC QSO Party and logged 21 Qs in the VHF contest.

WD3A, Tom, just returned from 2 weeks in DL-land where he did a little operating as DL/WD3A with a TenTec Scout and a dipole. Tom also reported recently purchasing a TS-850AT off the Internet via ebay.

W3EKT, Ed, reported warming a seat at K3MQH during the VHF contest.

K3DNE, Ed, scored 123K in the VHF contest from home and is working with W8ZA in preparation for the HF contest season.

K8OQL, Jerry, is a new recruit for Bob's HF multi/multi this year.

K3IXD, Ed, gave it the old college try, but attempting to work the VHF contest from DM37 (Utah) with just a HT and 5 watts was NOT beneficial to the PVRC score. Sounds like he needs to get with someone from the area to the north of us to get a better grasp of the "captive rover" concept.

K2UOP, Tom, logged 89K in the VHF contest from West (by God) Virginia, but noted the overall activity level was down. He has also ordered one of ETO's new Alpha 99 amplifiers, but they are not even in production yet.

W3ZZ, Gene, reports the VHF portion of his home station is OK, except the 2m feedline. He operated on Spruce Knob with the K8GP crew and contributed to their 1.1M score. He will be at PJ9B (perhaps PJ1B) for CQWW phone. Finally, Gene will be reguying his tower this fall to accommodate a new 3' dish.

K3LP, Dave, has bought a new piece of property in eastern Frederick County, just south of Libertytown. He will join N3NT, K3UG and K7KL at J6R for CQWW SSB. That crew will be active 10/22 - 11/2 and will operate J6/own call before and after the contest. QSLs will go to N3NT.

K3UG, Barry, reports that the Ft. Detrick Army MARS station has paid part and full-time openings available for anyone with a General Class FCC license or above. The going rate is a very respectable \$19.80 an hour! Contact Barry for more details.

W8ZA, Bob, reports continuing preparations for the fast approaching HF contest season. Meeting adjourned.

NW REGIONAL MEETING MINUTES - Oct 19, 1999 By Greg Altig, N5OKR

In attendance were members N5OKR, K3MM, W8ZA, N3KTV, N4MM, WD3A, N3HBX, W9LT, K2UOP, and K8OQL. and guests Lori and Tayler.

>From the introductions: K3MM, Tyler, graced us with the presence of his lovely wife, Lori, and adorable daughter, Tayler (a.k.a Cheeky Cheese). That's a brave man that lets his "womenfolk" in the company of this riff-raff! Tyler also announced the nominations for PVRC officers this year. He received a phone call FROM (!) Force 12 telling him his two new C49XR beams were being shipped the next day. This antenna is a 23-element tri-bander (10/15/20) on a 49' boom, with 4 elements on 20, 6 on 15, and a whopping 13 on 10 meters. These two monsters are destined to be stacked at 48' and 96' on Tyler's new tower. He also announced he is slated to be teamed with his Siamese twin, K3RA, at W3LPL as usual. What is unusual is that these vacuum cleaners of the airwaves will be on 15m vice 20!

WD3A, Tom, reports getting a new Hustler 5-band vertical in the air and finding it is quieter than his old dipoles. He has WRITELOG up and running with his sound card for the RTTY contest.

N3KTV, Jim, proudly announced he impressed approximately 30 females recently. Whoa, boys! Further investigation revealed he was in N. Virginia with a Girl Scout Troop for the JOTA. They had good success on HF, but didn't quite reach EU and missed a JA opening on 10m.

N4MM, John, has been working with the help of K8OQL to up-grade the contest station. He also reports rumors of a N. Korea DX operation coming up in March or June.

K8OQL, Jerry, is back on 160m for the winter, reportedly to "give K3SX some competition". He will be at W8ZA for CQWW SSB and CW.

N3HBX, John, announced all antennas are back up and ready for contesting.

K2UOP, Tom, told us that ETO has promised him his new Alpha 99 by November (read, March). He is currently improving his 40m setup. W9LT, "Indiana" Lamar, just got back from the "other" coast where he was visiting his son and daughter. He has been working at K3SA's station running new feedlines and other upgrades.

W8ZA, Bob, recently ran some new hardline to the 10/15m stacks to replace some old RG-213. Sounds good, huh? The problem is that when the installation was complete, he found he lacked about 40dB of receive signal all of a sudden! A check of one run resulted in a reading of no reflected power; the other registered 0.8dB loss over the 200ft run. But when attached to a receiver; nothing. Reconnecting the RG-213 (luckily left in place) resulted in normal signals again. Things that make you go hmmmmm.

NEWS FROM THE CENTRAL VIRGINIA CONTEST CLUB

The Central Virginia Contest Club (CVCC - many members PVRC also) invites you to a DX presentation by Jon Rudy, 3DA0CA on 11/12/99 at 7:30 PM in the Mennonite Church on Staples Mill Road in Richmond, VA. The church is about 1/2 mile north of Broad Street. This program has been arranged by Jon's manager of the last several years, Bob Eshleman, W4DR.

Jon is now living in Harrisonburg, Virginia studying at a Seminary. Jon was very prolific during his stay in 3DA0CA land and Bob was quick to follow up with the QSLs. Jon is also an excellent CW operator who we hope to recruit for M/M contests for PVRC. This should be a fun evening! (Info from John Youell, WA4QDM)

All CVCC and PVRC members are asked to look for PJ4B from Bonaire in both the phone and cw CQWW DXtests. Among the ops will be 2 PVRCers with PVRC getting a percentage of the total score. PJ4B will be attempting to establish a new worlds record in each contest and CVCC and PVRC members working PJ4B on all 6 bands will be a big help. (Info from Jack Reichert, N4RV)

CONTEST STATION DESCRIPTIONS ON THE WEB by Pete Smith, N4ZR

Scott Tuthill, K7ZO, was the originator of the Contest Station database. From 1995 through December 1997, Scott harvested station descriptions from contest score reports on the 3830 Internet reflector. When it got to be just too much work, the database contained over 1000 descriptions of contest stations worldwide.

This is where I come in. For years, I've been fascinated by the station design decisions contesters make. Initially, I was influenced by the famous 1966 QST series by Paul Rockwell, W3AFM, which attempted to lay out a methodology for design decisions, in terms of "dollars per db." After spending a lot of time trying to figure out how these techniques could be further developed to account for today's much more sophisticated design knowledge and tools, I concluded that developing a single analytical framework is beyond me, at least.

So that left another aspect of Rockwell's work that intrigued me -- his listing of the pre-eminent stations of the day, and their equipment. I thought it would be interesting to collect a comparable list for 1999, and see what has happened to station design over the last 33 years.

I contacted Scott, and got his permission to adapt his database to the World Wide Web and make it available for on-line reference and updating (at <http://206.102.70.3/search.htm>). Earlier this month I got the first prototype running on my office machine, and the rest is history. Response has been very good -- over 60 visitors to the web page on an average day, and close to 100K of revisions and new entries in just the first week.

Plans for the database -- other than making it continuously available --include adding fields as the need becomes evident, perhaps adding another entire database for VHF+ contesters, and then writing an article or articles about what the database shows, for NCJ, CQ-Contest, or some other venue. So stay tuned....

SHORT NOTES by the editor

Rich Boyd, KE3Q, the club Secretary, announced that PVRC Christmas dinner will be Monday night, December 13, our regular monthly meeting night. If you are in the military and can get us into either the officers club or enlisted club at a place like Andrews

AFB, we would appreciate your stepping forward. We all prefer a banquet room environment rather than the public restaurant situation we've done the last few years. We're exploring all options. Another good option might be a commercial restaurant that has a separate room. Location? Anywhere near the DC Beltway is probably preferable as compromise driving distance for most. Ideas? Please contact Rich.

Though not a club function, the popular annual "Beezer" Christmas dinner will on Monday, December 20th, at the Cuckoo's Nest, 333 Olney-Sandy Springs Road (Rt 108), Olney, MD. Please RSVP to W2BZR via packet by December 9th.

PVRC members N3GM Ron Tobin, NB30 Steve Cuccio, and K3TM Roger Kaul held a sub-regional meeting on Thursday, October 14, 1999, at the Army Research Laboratory, Adelphi, MD. They discussed plans for sweepstakes from their respective stations.

Leo, MM/W3LEO, will be QRV from Portpatrick in southwest Scotland from 21 October to 12 November. He plans to be in the CQWW, at least on the Saturday. Outside of the contest, look for him on 17 SSB or 10 SSB. He'll use an Icom 706, 10-15-20 Meter Vertical, and 17-meter dipole. Leo says this is a vacation not a DXpetition and times on the air will depend on the antennas, propagation, and when the pubs are open. QSL via W3LEO CBA with SASE or buro.

Howie Hoyt, N4AF lets us know that the PVRC/NC web site server has been upgraded to a Pentium III 500Mhz with 45Gb. Howie says that messages to the PVRC reflector will BOUNCE if they include attachments and your browser is set to use mime multi-part. The PVRC FAQ will be updated to reflect this.

Gene Smar, AD3F, asks if any reader has a Trylon tower? He is planning on building one to hold up a Bencher Skyhawk for a single-tower station early next year and could use some expert advice and assistance.

ATTENTION SWEEPSTAKES OPS!. Bob Dannals, W2GG, would like to receive in addition to your large scores, a copy of your log file electronically via [\[email protected\]](#). Whatever SS log you submit to the ARRL (phone and/or CW), please forward a copy to him also. No entry is too large or too small. Bob will search the logs for possible PVRC recruits by sorting the logs and checking distances from the PVRC club center. Lists of possible recruits will be forwarded to all regional chairmen in January or February.

S C O R E S by Bob Dannals, W2GG

Changes/additions/deletions to W2GG via [\[email protected\]](#) or packet

= missing information

ARRL VHF SS RESULTS (#7 10/4/99)

CALL	BND	QSO	MULTS	TOTAL
------	-----	-----	-------	-------

SINGLE OPERATOR

K3DNE	6	488	165	122,430
K2UOP/8	#	393	147	89,376
K3ZO	2	318	84	26,712
K4SO	2	125	37	4,625
KC4B	2	86	29	2,494
N4MM	#	43	24	1,032
K3DI	1	9	1	9

ROVER

ND3F	#	572	159	190,000
W3CQH	5	107	39	5,187

MULTI-OP

K8GP	13	1809	414	1,114,902
K3MQH	#	####	###	798,000
W3YOZ	4	297	109	39,022

12 LOGS	TOTAL	2,393,789
---------	-------	-----------

Operators:

K3MQH	K3MM W3EKT W3SST K3RA W2GG AI3M N3EYB K3VQ K3SUI K3MQH
K8GP	K1RA K1TR K1HTV KA1TB W3ZZ W4XP K6LEW K8ISK Mandi
ND3F	ND3F KC3VO
W3CQH	W3CQH K3JAY
W3YOZ	WR3Z KA3EJJ K4VV WX3B

REFERENCE PAGE. Please send corrections to the editor.
No changes were made during October.

PVRC Officers

President

K3MM	Tyler Stewart	301-414-5444	
------	---------------	--------------	-----------------------------------

Vice President

N3OC	Brian McGinness	301-652-6768	
------	-----------------	--------------	-----------------------------------

Secretary

KE3Q	Rich Boyd	301-464-8014	
------	-----------	--------------	-----------------------------------

Treasurer

WR3L	Dave Baugher	410-DX1-WR3L	
------	--------------	--------------	-----------------------------------

Historian

K3SA	Steve Affens	301-774-0558	
------	--------------	--------------	-----------------------------------

Membership Sec

W2GG	Bob Dannals	410-472-2004	
------	-------------	--------------	-----------------------------------

PVRC Charter Members:

W3GRF (SK), W4AAV (SK), W4KFC (SK), N0FFZ (SK), W4LUE, W7YS, VP2VI
(W0DX), W3IKN, W4KFT.

PacketCluster Contest/DX System, MHz:

W3LPL	Glenwood MD	145.590	441.250
KE3Q	Bowie MD	145.570	445.375
WR3L	Baltimore MD	145.610	440.950
N3RR	Rockville MD	145.510	441.325
K3SKE	Frederick MD	144.930	
N4OHE	Mt.Weather VA	145.710	440.925
NE3H	Harrisburg PA	144.970	
K3MQH	S Mountain PA	145.630	
N4SR	Woodbridge VA	145.630	*
K4FJ	Mt. Vernon VA	145.770	*
W4XP	Bull Run Mt "	144.990	

This system is sponsored by the Potomac Valley DX Spotting Network except "*" are independently funded by each SYSOP.

PVRC on Internet.

PVRC web site by K3SA:

<http://www.pvrc.org>

PVRC/NC web site by KS4XG

<http://www.pagesz.net/~pvrcnc>

PVRC reflector: (editor N4AF)

Get latest scores & activities info here

To post: [\[email protected\]](#)

To join* send email to:

[\[email protected\]](#)

Text: SUBSCRIBE PVRC

*Members only. If your call is not within your URL, then send msg to [\[email protected\]](#)

PVRC dues and ARRL renewals: The annual dues are by donation - hopefully at least \$10. Club gets a cut from ARRL renewals sent via PVRC. Both dues and renewal checks should be made to PVRC and sent to Dave Baugher, WR3L, 615 Rockway Beach Av, Baltimore, MD 21221. Thank you.

Newsletter & Autocall column Editor: Dick Wilder, K3DI, 913 Shore Acres Rd, Arnold, MD 21012-1724. Voice 410-757-6706, FAX/modem 410-757-6720, Dxcluster packet, and [\[email protected\]](#) The Newsletter deadline is normally ABOUT the day after the third Friday of each month. The FAR deadline is 60 days prior to the issue date.

CENTRAL: The Central Meeting is always the second Monday (except June, July, and August) at 7:30 pm. The central meeting generally alternates between MD and VA locations. A pre-meeting dinner is usually held between 5:00 and 6:30 pm. Check via 147- repeater.

VA LOCATION: The Patrick Henry (Public) Library, Route 123, Vienna, VA. Pre-meeting dinner at Outback, Old Branch Ave.

MD LOCATION: Church of the Nativity (Episcopal), Route 5, Temple Hills, MD. Pre-meeting dinner at Topolino's.

NORTHWEST: Greg Altig 410-775-7313 [\[email protected\]](#) Meets at 7:30 pm on the third Tuesday every month at Tully's Grill, 1080 W. Patrick St, Frederick, MD. Same center as Shoppers Food Warehouse. Essentially includes WEST VIRGINIA area.

NORTH CAROLINA: Chair: Jim Stevens, K4MA, [\[email protected\]](#); Sec: Pete Soper, KS4XG, [\[email protected\]](#), hm: 919-362-4635, wk: 919-481-6874. Activities: Jim Stevens, K4MA. POC is K4MA & KS4XG. Howie Hoyt, N4AF, [\[email protected\]](#) is PVRC reflector editor. PVRC/NC meets at 6:00 pm the first Thursday of every month at Ryan's Family Steakhouse at Crossroads in Cary.

TIDEWATER (VA) COLONY OF PVRC:

Don Lynch W4ZYT 757-486-0728 [\[email protected\]](#) Meetings the 3rd Tuesday of every month are held jointly with the VA DXCC at The Golden Corral corner of Battlefield Blvd South and Volvo Pkwy in Chesapeake, VA. Easy access from I-64 at Rte 168 (Battlefield Blvd S) exit. Dinner at 1830 and meeting at 1925.

SOUTHWEST VA CHAPTER: Coordinator: John Mitchell, K4IQ, Catawba, VA 540-384-7377, [\[email protected\]](#) Monthly meetings alternate between Roanoke area locations

THE BWI REGIONAL/PVRC: Weekly breakfast Wed at 7:30 AM at Basil's Deli Port on Elkrdige Landing Rd 1/4 mile South of Winterson Road 410-850-4333. Director: Ike Lawton, W2EOS, 410-263-2830. Secretary: Howard Leake, W6AXX, 410-465-7008, [\[email protected\]](#)

OVER-THE-HILL LUNCH BUNCH: Rotating hosts announces meeting info. Ben Shaver, AA4XU, 703-534-4740; Andy Anderson, W3XE, 301-384-7771, [\[email protected\]](#), Holiday Inn, College Park MD; and Bill Leavitt, W3AZ, 301-292-5797, Ramada Inn, Oxon Hill

PENNSYLVANIA: Steve Cutshall, K3TZV, [\[email protected\]](#), 717-763-0462.

RAPPAHANNOCK: Steve Bookout, NR4M (ex-NJ4F) [\[email protected\]](#) Also, Larry Schimelpfenig, K7SV, [\[email protected\]](#)

WOODBIDGE: Jack O'Mara W4NF, [\[email protected\]](#) 703-680-4106 and Cliff Deel W4CE, [\[email protected\]](#) 703-491-0841

CENTRAL VA: Bob Morris, W4MYA 804-457-9011 [\[email protected\]](#) CVCC/PVRC monthly meetings are held the 2nd Tuesday at the First Mennonite Church on Staples Mill Rd at 7:30 PM. Optional 6PM-ish dinner at the Crazy Greek Rest, Staples Mill Rd. Talk-in is 145.430 MHz.

SOUTHERN MD: Chair: Barry Shapiro, WR3Z. H:301-862-2466

[\[email protected\]](#)

Usually on the first Monday of Sep, Dec, Mar, and May at N1WR's.

EASTERN-SHORE (DEL-MAR-VA): Dallas Carter, W3PP 302-875-0550

[\[email protected\]](#)

SHENANDOAH: Bill Hinkle KB3AUG [\[email protected\]](#) 304-567-3138

NORTHEAST: WR3L See info above. (officers)

ANNAPOLIS CREW: K3DI. See info at left column (under editor).

OTHER MEETINGS based on prior year(s):

May.	Meeting at Dayton Hamvention
Jun.	W3LPL open house Sat before Field Day. With joint FRC/PVRC meeting on alternate years. (1999, 2001, summer. When joint FRC/PVRC is at FRC, they announce the date.
Jul.	PVRC/NC cook out
Jul.	Open house, W4MYA, Goochland,
Aug.	NCDXA/PVRC Fowlfest at W3YOZ
Aug.	VHF++ meeting/workshop at ND3F
Sep.	PVRC meeting at the FARfest Bowie
Sep.	Open house, WR3L, Baltimore
Dec.	Christmas dinner, DC area.

5 MILLION (CLUB COMPETITION) AWARD

Month and number of the full week end.

Jan 3	ARRL VHF Sweepstakes
Jan Last	CQWW 160m CW
Feb 3	ARRL DX CW
Feb Last	CQWW 160m SSB
Mar 1	ARRL DX SSB
Mar Last	CQWW WPX SSB
May Last	CQWW WPX CW
Sep 2	ARRL VHF QSO Party
Oct Last	CQWW DX SSB
Nov 1	ARRL Sweepstakes CW
Nov 3	ARRL Sweepstakes SSB
Nov Last	CQWW DX CW
Dec 1	ARRL 160m Mixed
Dec 2	ARRL 10m Mixed

Standings at <http://jctc.org/pvrc5m.htm>

Roster updates at: <http://www.pvrc.org/pvrcmm98.htm>

A FREE (SHAREWARE) COPY OF CT 6.26 (with updated files) is available from K3DI.